

narrowing process only in the axis of higher resolution.

19. (New) A printing system comprising:

one or more print cartridges having a given print resolution;

a carriage for mounting the one or more print cartridges;

motor means for scanning the carriage across a print medium; and

a writing system for downscaling raster data from a high resolution $A = B$ bitmap to a lower resolution asymmetrical bitmap where A is not equal to B by completely eliminating certain linear sequences of pixels such as selected non-adjacent pixel rows resulting in a modified bitmap with a reduced number of remaining pixel rows, wherein said writing system performs a logical operation comparing “on” pixels in the eliminated rows with “off” pixels in selected adjacent remaining rows in order to preserve and transfer “on” pixels from an eliminated row to a remaining row for printing by the cartridges on the print medium.

20. (New) The printing system of claim 19 wherein the given print resolution of the print cartridges is less than the high resolution of the $A = B$ bitmap.

Remarks

Confirming the previous telephone interview, claim 1 has been amended to replace “thereby” with “by”.

Claims 1-4, 7, 8 and 10-14 have been rejected under 35 USC 102(e) for anticipation based on the Klassen patent 5,742,300. This rejection is respectfully traversed, and independent claim 1 has been further amended to emphasize features not disclosed or suggested in the Klassen reference.

Contrary to the Examiner's assertions, there is no disclosure of lowering a high resolution bitmap in the Klassen reference., and no disclosure of eliminating pixel rows. Rather Klassen starts with a 300X300 dip pixel image, "subsequently altering the pixel image to output an image with a visual appearance of a 300X600 dpi resolution." (Column 3, lines 34-37) See also column 4, lines 5-7:

"It is understood that step 102 is not limited to doubling the resolution but rather any increase in the resolution or density is within the scope of this invention"

After increasing the resolution, then Klassen implements a depletion or thinning by turning off individual pixels (see Fig. 3D and accompanying text).

In contrast claim 1 as amended provides for decreasing the resolution by converting a high resolution bitmap into a downscaled lower resolution bitmap with a reduced number of rows (i.e., certain selected alternate rows have been completely eliminated so that the resolution in that axis is lowered!).

Applicants respectfully request that the anticipation rejection based on Klassen be withdrawn. The various citations by the Examiner are taken out of context and do not disclose the new features recited in the rejected independent and dependent claims.

The obviousness rejection of claim 5 based on Klassen and Deshpande is no longer justified in view of the previous arguments, and favorable reconsideration is requested.

The obviousness rejection of claim 6 based on Klassen, Deshpande and Kanematsu is also no longer justified in view of the previous arguments, and favorable reconsideration is requested.

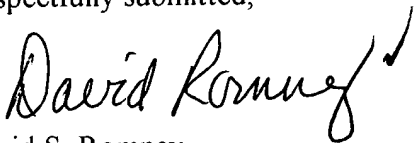
Claims 9 and 15 stand rejected under 35 USC 103(a) for obviousness based on Klassen in

view of Rylander. The previous arguments distinguishing Klassen are incorporated here. Moreover Rylander talks of increasing resolution in both directions – the various print masks in Rylander are therefore created and used for a different purpose than the claimed invention of claims 9 and 15, which provide for preserving “on” pixels from entire eliminated rows by transferring them to “off” pixels in rows still remaining after the resolution downscaling. See the downscaling from 1200X1200 to 1200X600 in the exemplary embodiments of Figs. 5, 6 and 7 of the present application.

New claims 16-20 have been added which recite related features not disclosed or shown in the cited references, and they are believed to be patentable for the same reasons as the other claims 1-15 as amended..

In view of all the foregoing, it is believed that this case is now in condition for allowance, notice of which is earnestly solicited.

Respectfully submitted,



David S. Romney
Registration No. 24,266
Attorney for Applicants
(801) 536-6914

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Encl. Appendix showing clean version of claims after amendments